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# WESTCHESTER HETEROPTERA. — II. ADDITIONS, CORRECTIONS AND NEW RECORDS.

By J. R. de la Torre Bueno,

WHITE PLAINS, N. Y.

The *raison d'être* of this list is set forth in its predecessor. In this are given the fruits of the work of the season of 1909, including the winter of 1908–9. As will be seen, there are no less than 30 species added to those recorded last year, which brings the total up to 138 species for Westchester Co. When it is considered that Mr. E. P. Van Duzee's Buffalo list, the result of his collecting and that of others, yielded only 127 species for the families I enumerate, the present relation is not to be despised.

A number of corrections due to the ceaseless change of nomenclature have to be made. These will be noted in their proper places. The identification of forms of our fauna by means of the imperfect descriptions of the early hemipterists have saddled us at this day with a burden of misinformation which very fortunately is being reduced year by year by the labors, alas! not of our own, but of European entomologists. It appears to me a fundamental axiom that every entomologist, and very especially every hemipterist, before referring an American form to a genus peculiar to some other region of the globe, should make it his business to procure authenticated specimens of the type species of that genus. Then a careful comparison between the two forms should serve to settle the point definitely. As it is, consider the labor necessary in hemipterology to settle beyond doubt the identity of some 30 or so species with European forms. A certain proportion of these, due to the labors of Dr. Horvath, are now decided definitely, although there is some question as to two or three of them, which Van Duzee has brought up in a recent paper.\*

Superfamily PENTATOMOIDEA.

### Family PENTATOMIDÆ.

Subfamily I. ASOPINÆ Schout.

### Genus PERILLOIDES Schout.

### 1. P. circumcinctus Stål.

White Plains, July 3, nymph; 10th, adults and nymphs; 25th, adults.

### Genus MINEUS Stål.

#### 2. M. strigipes H. S.

White Plains, April 18, perched on a rock; July 4, 5, 10; Sept. 3, nymph in last instar; Sept. 5, 25 and 26.

#### Genus APATETICUS Dallas.

Van Duzee differs with Schouteden in regard to the arrangement of this genus, in the article cited. As to whether *Podisus* is entitled to full generic rank or is only a subgenus will have to be settled by the specialists. I defer to Van Duzee in his opinion, and rearrange our species accordingly.

3. A. (Apœcilus) cynicus Say.

White Plains, Aug. 30, in flight.

4. A. (Apœcilus) bracteatus Fitch. No new record.

### Genus PODISUS H. S.

### 5. P. (Podisus) maculiventris Say.

White Plains, Feb. 12, hibernating adults under a stone.

6. P. (Podisus) modestus Dallas. No new record.

Subfamily PENTATOMINÆ.

### Genus BANASA Stål.

### 7. B. catinus Dallas.

Scarsdale, May 25, swept under apple tree.

\* Can. Ent., XLI, No. 10, pp. 369-375, Oct., 1909.

### Genus NEZARA A. & S.

### 8. N. hilaris Say.

White Plains, April 18, under a stone on a hillside. August 15 and Sept. 6, nymphs in the grasses in a marshy meadow.

### Genus THYANTA Stål.

# 9. T. custator Fabr.

Scarsdale, May 25.

#### Genus COSMOPEPLA Stål.

# 10. C. carnifex Fabr.

White Plains, May 31, July 10, Sept. 26.

#### Genus CŒNUS Dallas.

# 11. C. delius Say. White Plains, Feb. 7, torpid under stones.

### Genus EUSCHISTUS Dallas.

- 12. E. variolarius P. B. White Plains, Feb. 7 and 20, torpid.
- 13. E. tristigmus Say. White Plains, Feb. 21, April 4, under stones.
- 14. E. fissilis Uhler. Scarsdale, May 25, Rye Beach, Aug. 21.
- 15. E. ictericus L. White Plains, Aug. 8, in a damp meadow.

#### Genus SOLUBEA Bergr. (n. n. for Œbalus Stål.)

# 16. S. pugnax Fabr.

Rye Beach, Aug. 21.

#### Genus MORMIDEA A. & S.

### 17. M. lugens Fabr.

White Plains, March 7 and April 18, under stones.

#### Genus PENTATOMA Olivier.

# 18. P. senilis Say.

Rye Beach, Aug. 21.

### 19. P. saucia Say.

Rye Beach, July 17, adults and nymphs, on a fine grass growing in the higher parts of the salt marsh.

#### Genus TRICHOPEPLA Stål.

### 20. T. semivittata Say.

Rye Beach, Aug. 21.

#### Genus PERIBALUS M. & R.

# 21. P. limbolarius Stål.

The past year's observation repeated.

### Genus BROCHYMENA A. & S.

#### 22. B. quadripustulata Fabr.

White Plains, March 28, under stone at foot of tree; May 9, under bark of apple log in a field.

Subfamily CYDNINÆ.

### Genus SEHIRUS A. & S.

23. S. cinctus P. B. No new record.

### Genus AMNESTUS Dallas.

- 24. A. spinifrons Say. White Plains, May 29, Swept from grasses.
- 25. A. pusillus Uhler.

White Plains May 30, June 6.

Subfamily GRAPHOSOMINÆ.

#### Genus AMAUROCHROUS Stål.

### 26. A. cinctipes Say.

White Plains, April 3, sifted under elder bush at edge of a marshy meadow.

Subfamily Scutellerinæ.

#### Genus EURYGASTER Lap. de Cast.

### 27. E. alternatus Say.

White Plains, May and June.

#### Genus HOMŒMUS Dallas.

### 28. H. æneifrons Say.

White Plains, June 26.

#### Family THYREOCORIDÆ.

### Genus THYREOCORIS Schrank.

# 29. T. unicolor P. B.

Scarsdale, May 25.

#### 30. T. pulicarius Germar.

White Plains, Feb. 12, sifted from leaves in the woods.

### Family ARADIDÆ.

### Subfamily ARADINÆ.

#### Genus ARADUS Fabr.

31. A robustus Uhl. White Plains, Oct. 31

#### 32. A. similis Say.

White Plains, February, March, April, hibernating under bark of dead white birches. June 13, active under fungus.

#### 33. A. lugubris Fallén.

White Plains, July 31, on fence.

### Family COREIDÆ.

Subfamily MEROCORIN.E.

### Genus CORYNOCORIS Mayr.

#### 33a. C. typhæus Fabr.

White Plains, Sept. 3, nymph and adult at edge of marshy meadow, in field; Sept. 19, Oct. 9.

#### Subfamily ACANTHOCEPHALINÆ.

#### Genus ACANTHOCEPHALA Lap. de Cast.

### 34. A. terminalis Dallas.

White Plains, July 10, nymphs in second and third instars; 31st, full grown nymph; Sept. 6, the same.

Subfamily CENTROSCELINÆ.

#### Genus ANASA A. & S.

### 35. A. tristis de G.

White Plains, June 7, Sept. 26.

Subfamily MICRELYTRINÆ.

### Genus PROTENOR Stål.

### 36. P. belfragei Hagl.

White Plains, May 15; June 26, nymphs in various stages. July to October, adults only.

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### Subfamily ALYDINÆ.

### Genus MEGALOTOMUS Fieb.

### 37. M. quinquespinosus Say.

White Plains, July 10, Sept. 6 and 26.

#### Genus ALYDUS Fabr.

### 38. A. eurinus Say.

#### 39. A. pilosulus H. S.

The latest date for these in White Plains is Oct. 12.

40. A. conspersus Mont.

White Plains, June 6, Sept. 4.

#### Subfamily CORIZINÆ.

### Genus CORIZUS Fall.

### 41. C. lateralis Say.

White Plains. Common in spring and late summer.

#### 42. C. nigristernum Sign.

White Plains, August and September; nymphs as late as the 26th of the latter month.

Subfamily BERYTINÆ.

#### Genus NEIDES Latr.

### 43. N. muticus Say.

White Plains, July 10, adult and nymphs in last stage; July 18, nymph in last instar; Aug. 15 and 28, Sept. 6. In shrubbery at the edges of woods.

### Genus JALYSUS Stål.

### 44. J. spinosus Say.

White Plains, April 4, dead under a stone; June 6, Sept. 26.

Family LYGÆIDÆ.

Subfamily LYGÆINÆ.

#### Genus LYGÆUS Fabr.

### 45. L. kalmii Stål.

White Plains, July 10.

### Genus NYSIUS Dallas.

Since the date of the previous paper, a number of changes have been made in the nomenclature of this genus. Van Duzee has reconsidered his synonymy of the form listed as *jamaicensis*, and Horváth has shown the identity of *angustatus* with a European species.

46. N. ericæ Schill. (= angustatus Uhl.).

White Plains, May 15 and 30; Sept. 25 and 26.

 N. providus Uhl. (= jamaicensis V. D., not Dallas). June to Sept.

Subfamily CYMINÆ.

### Genus KLEIDOCERYS Westw. (= Ischnorhynchus Auctt.).

48. I. geminatus Say (= resedæ of Am. authors, nec Panz).

White Plains, April 17, on sweet birches; May 1 and 15.

Dr. Horváth has found that our species is not identical with the European one.

#### Genus CYMUS Hahn.

In this genus Dr. Horváth's work has changed completely our conception of the American species.

### 49. C. luridus Stål.

White Plains, May 29 and 30, June 12, 19 and 26. Common in marsh grasses.

### 50. C. angustatus Stål.

White Plains, May 1, 15, 26 to 30, June; Scarsdale, May 25; Rye Beach, July 17. Common at all times.

This is the species that appeared in the previous list as *Cymodema-tabida* Spin.

51. C. discors Horv. (= luridus of previous list).

White Plains, July and August, very rare.

### Subfamily BLISSINÆ.

#### Genus ISCHNODEMUS Fieb.

### 52. I. falicus Say.

White Plains, May 29, June 12.

#### Genus BLISSUS Klug.

### 53. B. leucopterus Say.

White Plains, Feb. 7 and 12, under stones in fields. May, sweeping. Rye Beach, Aug. 21.

#### Subfamily GEOCORIN.E.

#### Genus GEOCORIS Fallén.

## 54. G. bullatus Say.

White Plains, May 15 and 31, July 3.

- 55. G. discopterus Stål. White Plains, May 15, Aug. 22, Sept. 3.
- 56. G. uliginosus Say (= ater, of Am. authors, nec Fabr.). White Plains, May, August and September.

### 57. G. piceus Say.

White Plains, April 11, under stone, quite active. May, June, August. Rye Beach, Aug. 21.

### Subfamily PACHYGRONTHINÆ.

#### Genus PHLEGYAS Stal.

 P. abbreviata Uhl. (= annulicrus Auctt. for Am. form). May to August.

#### Genus ŒDANCALA A. & S.

### 59. Œ. crassimana Fabr. (= dorsalis Say).

White Plains, June to September. Taken in large numbers in grasses in a marshy meadow, nymphs and adults in July and August.

### Subfamily OXYCARENIN.E.

### Genus CROPHIUS Stål.

### 60. C. disconotus Say.

White Plains, Oct. 3, another single specimen.

### Subfamily APHANINÆ.

#### Genus LIGYROCORIS Stål.

### 61. L. silvestris L.

White Plains, throughout the summer. There may be more than one species under this name.

#### Genus PERIGENES Distant.

62. P. constrictus Say (= fallax Heid. sec. V. Duz.). White Plains, September and October, in short grasses.

### 63. P. costalis Van Duzee.

White Plains, July 3, Sept. 25 and 26, Oct. 10.

#### Genus HERÆUS Stål.

### 64. H. plebejus Stål.

April 4 and 11, under stones, hibernating. May 28 and 29, July 24, Sept. 25 and 26, Oct. 9 and 10; taken by sweeping on all these dates. Oct. 31, under stones.

### Genus ORTHŒA Dallas (= Pamera Say).

#### 65. O. basalis Say.

White Plains, Feb. 1, hibernating under stones in field; June and July, September and October.

#### Genus CLIGENES Bergr.

### 66. C. minutus Bergr.? (= pilosulus Stål?).

White Plains, April to early May, under stones; late May, swept in marshy fields. Scarsdale, May 25.

#### Genus EMBLETHIS Fieb.

### 67. E. vicarius Harv.

White Plains, Sept. 3 and 4, running among grasses, at the roots; Nov. 8, under stones.

### Genus EREMOCORIS Fieb.

### 68. E. ferus Say.

White Plains, April 18, Sept. 6, Oct. 31, under stones.

### Genus SCOLOPOSTETHUS Fieb.

#### 69. S. atlanticus Harv.

White Plains, May 15 and 30, June 6 and 12, July 5, at base of clumps of marsh-grasses.

Family TINGIDÆ.

Subfamily PILEMINÆ.

### Genus PIESMA Lep. & Serv.

### 70. P. cinerea Say.

White Plains, July 10 and August 28, swept from weeds.

Subfamily TINGIDINÆ.

### Genus MELANORHOPALA Stål.

### 71. M. clavata Stål. White Plains, June 26.

#### Genus CORYTHUCA Stål.

72. C. ciliata Say. White Plains. March, 1910.] BUENO: WESTCHESTER HETEROPTERA.

#### 73. C. arcuata Say.

White Plains, May and July.

#### 74. C. pergandei Heid.

White Plains, May 15, June 12 and 30, on black alder.

#### Genus LEPTOBYRSA Stål.

#### 75. L. explanata Heid.

White Plains, June 6, nymphs; July 10, Aug. 28, ova; nymphs and adults, Sept. 6 and 26.

### Genus GARGAPHIA Stål.

### 76. G. tiliæ Walsh. White Plains, May 26.

#### Genus PHYSATOCHILA Fieb.

### 77. P. plexa Say.

White Plains, June 12. Swept in marshy meadow.

Superfamily NEPOIDEA Kirk.

#### Family NABIDÆ.

#### Genus PAGASA Stål.

#### 78. P. fusca Stein.

White Plains, July 25, Aug. 22 and 28, nymph; Sept. 4, 26 and 27.

### Family GERRIDÆ.

### Subfamily VELIINÆ.

Owing to a slip of the printer, all the species were put under *Rhagovelia*. The correct division is as follows:

#### Genus RHAGOVELIA Mayr.

79. R. obesa Uhl.

### Genus MICROVELIA Westw.

80. M. americana Uhl.

81. M. capitata Guér.

82. M. sp. (= pulchella Auctt. for N. Am. form).

Subfamily GERRINÆ.

#### Genus GERRIS Fabr.

#### 83. G. remigis Say.

Occurs throughout the county and state.

### 84. G. conformis Uhl. Mamaroneck, May 24.

#### Family HYDROMETRIDÆ.

### Genus HYDROMETRA Latr.

### 85. H. martini Kirk.

White Plains, May 9.

Family NÆOGEIDÆ.

#### Genus NÆOGEUS Lap.

### 86. N. concinnus Uhl.

White Plains, May 15.

### Family REDUVIIDÆ.

Subfamily EMESINÆ.

### Genus EMESA Fabr.

### 87. E. longipes de G. White Plains, Aug. 28, Sept. 6.

### Genus BARCE Stål.

88. B. annulipes Stål. White Plains, April 4, Aug. 31, Oct. 10, swept in a field; Oct. 31.

Subfamily ACANTHASPIDINÆ.

### Genus REDUVIUS Lam.

### 89. R. personatus L. White Plains, July 3, on kitchen floor at night.

Subfamily PIRATINÆ.

### Genus MELANOLESTES Stål.

# 90. M. picipes H. S. White Plains, April 18 and 25, under stones.

### 91. M. abdominalis H. S. White Plains, April 4 and 18, May 9.

#### Subfamily HARPACTORINÆ.

### Genus ZELUS Fabr.

### 92. Z. luridus Stål.

Scarsdale, May 25, nymphs.

#### Genus FITCHIA Stål.

### 93. F. nigrovittata Stål.

White Plains, April 4, wingless form, under a hillside stone; June 12, one fully winged, swept.

#### Genus ACHOLLA Stél.

### 94. A. multispinosa de G.

White Plains, April 14, nymph in last instar, on fence under trees.

#### Genus SINEA A. & S.

#### 95. S. diadema Fabr.

White Plains, Sept. 3, 11 and 26, Oct. 3.

Superfamily MIROIDEA.

### Family ANTHOCORIDÆ.

### Genus PIEZOSTETHUS Fieb.

### 96. P. sordidus Reut.

White Plains, Sept. 26; Hartsdale, May 22.

### Genus TRIPHLEPS Fieb.

### 97. T. insidiosus Say.

Rye, Aug. 21.

Superfamily NOTONECTOIDEA.

Family NAUCORIDÆ.

Subfamily NAUCORINÆ.

### Genus PELOCORIS Stål.

### 98. P. femoratus Pal. Beauv.

White Plains, July 25, nymph.

### Family NOTONECTIDÆ.

Subfamily NOTONECTINÆ.

### Genus NOTONECTA Linné.

### 99. N. insulata Kirby.

#### 100. N. undulata Say.

White Plains, Dec. 5 and 20; Feb. 20, swimming under thin ice.

### Genus BUENOA Kirkaldy.

### 101. B. margaritacea Bno.

White Plains, Dec. 5 and 20, Feb. 22, March 7, swimming under clear thin ice.<sup>1</sup>

<sup>1</sup> The appearance of the first volume of Kirkaldy's Catalogue has rendered obsolete the arrangement of the *Cimicidæ* (*Pentatomidæ*) and changed the names of a number of genera and species, but it is impossible to make the requisite corrections in the proof before me. J. R. T. B.